Islamic Relief Kenya

TENDER DOCUMENT FOR

REGULARIZATION, EXPANSION AND OTHER ASSOCIATED WORKS AT WALDIRI VILLAGE EARTHPAN IN MANDERA NORTH,

MANDERA COUNTY

REF NO: IRK/DELIVERS/MDR/01/11/2024

ISSUED ON: Thursday, 24th October 2024

CLOSING DATE: Thursday, 7th November 2024 **11.00 AM**

NAME AND CONTACT OF PROCURING ENTITY:

Islamic Relief Kenya
Kirichwa Road, off Ngong Road
P.O.BOX 417 – 00202 KNH, Nairobi
Email: procurement.Irk@islamic-relief.or.ke

INSTRUCTION TO BIDDERS

Established in 1984 in the UK, Islamic Relief is an international NGO seeking to promote sustainable economic and social development by working with local communities through relief and development activities regardless of race, color and religion, and without expecting anything in return.

IR started operations in Kenya in 1993 on orphan's sponsorship programme through a local CBO in Mandera District, Northern Kenya. It opened its fully fledged office in March in 2006 at the heightof drought in the Horn of Africa. Since then, IR has been providing humanitarian and developmentassistance to vulnerable communities. Over these years it has implemented various developmentand relief activities in Mandera. This has remarkably changed the lives of the vulnerable and disadvantaged communities. In January 2010, IRK extended its operation to Wajir County and in January 2012 expanded to Garissa and Dadaab, and in October 2017 opened a programme office in Kilifi County.

Islamic Relief Kenya focuses on resilience projects namely: Food Security and Livelihoods, Water Sanitation and Hygiene, Cash Transfer Programming, Orphans Support and Sponsorship, women Empowerment, Education and Peace-building.

In Mandera and Kilifi Counties IRK is implementing a 24 months project ***"Development through livelihood Empowerment and Resilience Support Project"*** aiming to empower the vulnerable communities in Kilifi & Mandera counties through the provision of integrated interventions in the area of education, WASH and Economic Empowerment. The project will enhance access to inclusive and accessible education, improved alternative Economic Empowerment to the target households and increased availability of water for household use and food production

IRK will take deliberate steps to support Kilifi & Mandera communities in their journey to self-reliance through capacity building of relevant ministries at the National, County and Sub-counties levels, and increase efforts to involve county department officials in the routine monitoring and supervision of education, WASH and Economic Empowerment interventions. The project is anchored on three sustainable development goals covering WASH, Education and Zero Hunger.

IRK is planning to undertake Regularization, Expansion and Other Associated works at Waldiri Village Earthpan in Mandera North, Mandera County to provide safe drinking water for households and livestock.

A complete set of tender documents may be obtained Free of Charge by interested candidates by downloading from the link provided: Islamic Relief Kenya website: https://islamic-relief.or.ke

Complete one tender document in pdf format (max 15mb) with subject as tender name and reference number **REGULARIZATION, EXPANSION AND OTHER ASSOCIATED WORKS AT WALDIRI VILLAGE EARTHPAN IN MANDERA NORTH, MANDERA COUNTY TENDER: IRK/DELIVERS/MDR/01/11/2024 to** be submitted via email tenders@islamic-relief.or.ke no later than Thursday, 7th November 2024 11.00 AM

Tenders will be opened immediately thereafter in the presence of bidders or their representatives who choose to attend in the Islamic Relief Boardroom. Any tender documents received later than the deadline will not be accepted**.**

At the tender opening, IRK will announce the tender's names, total tender price, and such other details as the Employer, at his discretion, may consider appropriate. No tender shall be rejected at the tender opening except for late tenders. Tenders not opened and read out at the tender opening shall not be considered further for evaluation, irrespective of the circumstances.

Prices quoted should be inclusive of all taxes, must be in Kenya shillings and shall remain valid for (60) days from the closing date of tender.

INSTRUCTION TO BIDDERS
PROCURING ENTITY: ISLAMIC RELIEF KENYA. P.O BOX 417-00202 KNH, Nairobi

TENDER TITLE: REGULARIZATION, EXPANSION AND OTHER ASSOCIATED WORKS AT WALDIRI VILLAGE EARTHPAN IN MANDERA NORTH, MANDERA COUNTY.

1. All Tenders above must be accompanied by a Bid Bond at least 10% of the quoted amount valid for 180 days.
2. **Only** tenders submitted electronically will be accepted. Late tenders will be rejected

3. **Work Scope and Sites Details**

The tender is for undertaking the following components as per Annex I – BoQ and Annex II – Drawings: Regularization, Expansion and other Associated Works at Waldiri Village Earthpan in Mandera North, Mandera County

Eligible Bidders
The invitation for the bids is open to all interested eligible Companies/individuals who are duly registered with the national government, respective County governments and National construction authorities.

4. **Services**

All services to be done under the contract shall have their measurement and shall not be subcontracted.

5. **Cost of Bidding**

The bidders shall bear all costs associated with preparation and the submission of its bid & IRK will in no case be responsible for those costs, regardless of the conduct or outcome of the bidding process.

6. **Clarification of Bidding Documents**

Interested eligible candidates who may want to obtain further information or seek for clarification can do so by sending an email to Procurement.Irk@islamic-relief.or.ke OR **+254 727531220 / 2543861216.** IRK will respond in writing to any request prior to the deadline.

If you have any concerns – relating to this tender or otherwise – or want to make a complaint please Call us on +254 700 200 849 Email us at: complaints@irworldwide.org

7. **Amendment of Bidding documents**

At any time prior to the deadline for submission of bids, IRK May for any reason, at its own initiative or in

response to a clarification requested by a prospective bidder, modify the bidding documents & will be binding on them. The amendment will be notified in writing to all prospective bidders, who have received the bidding documents & will be binding on them. In order to allow prospective bidders responsive time in which to take the amendment into account in preparing their bids, IRK may, at its discretion, extend the deadline for bid submission.

8. Language of the Bid

The bid prepared by the bidder, as well as all correspondence & documents relating to the bid, supporting documents and printed literature furnished by the bidder shall be written in English language.

9. Bid Document Comprises.

The bid document prepared by the bidder shall comprise of the following:

a) Each page of the tender document is serialized.
b) Form of tender signed and stamped by the authorized person.
c) Completed and signed confidential business questionnaire form.
d) Certified Copy of Certificate of Incorporation/Registration.
e) Disclosure of business ownership (Directors/ Partners /Sole Proprietor). Attach a copy of CR12 Form
f) Certified Copy of Current Tax Compliance certificate from Kenya Revenue Authority – must verifiable online –itax
g) KRA PIN with VAT obligation
h) Certified Copy of Valid and current Business Permit
i) Certified copy of Valid registration for National Construction Authority NCA 7 and above - Water works
j) Certified copy of Valid Registration for National Construction Authority (NCA7 and above)- Electrical Works
k) Certified copy of Active Solar PV Contractors/Vendor License with Energy and Petroleum Regulatory Authority (EPRA).
l) Bidder to provide self-declaration that the person/tenderer will not engage in any corrupt or fraudulent practice.
m) Only certified Statement of comprehensive income for the last three years (Max. 3 pages) signed by auditors.
n) Company Profile with brief business description, physical location, address and company structure (Max. 5 pages).
o) Evidence of Past Experience in Similar work done for the last 5 years e.g. at least 5 signed contracts supported by LPO and Certificate of Completion
p) Copy of ID/Passport for Company Owner/Director
q) Bid bond (10% of the quoted amounts)
r) Key Technical staff and their CVs (Key people but not more than four CVs)
s) List of Key Equipment (**only** relevant equipment).
t) Detailed workplan and methodology statement: Work plan demonstrating flow of work from inception to site hand over) (Max 3 pages)
u) Bank Statement for 6 months (1st April 2024 – 30th September 2024)
v) Duly filled Tender B.o.Q and forms in the format provided
w) All copies of certified/mandatory documents must be Certified by a Commissioner of Notary/

Oath.

NB: - Partial delivery of the documents will lead to disqualification. Preference shall be given to qualified local supplier with valid licenses.

- *It is advisable that the bidder at own cost and convenience to undertake a physical visit and assessment of the particular site for the proposed works prior to the compilation of the bid.*

10. Bid Currencies

The bids prices shall be quoted in Kenya Shillings (KES).

11. Bids Prices

- The potential contractor shall submit his/her bid in the BOQ format provided in Annex I
- The bidders shall indicate the unit price where possible and the total bid price as indicated in the BOQ.
- Prices quoted by the bidder shall be fixed during the performance of the contract.

12. Withholding Tax

IRK shall retain 3% of contract value as withholding tax and remit to the government. A receipt shall be issued for this.

13. Retainer

IRK shall retain 10% of the contract value for a period of 6 months being defect liability.

14. IRK's right to vary quantities at the time of the award

IRK reserve the right at the time of award of contract to increase or decrease by up to 10% the quantity of work specified in the technical specification without change of unit price or other terms of condition.

15. IRK's right to accept any bid and/or reject any or all bids

IRK reserves the right to accept any bid and to annul the bidding processes and reject all bids at any time prior to award of contract, without, thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders on the grounds of its action.

16. Submission of Bids

The bidders shall submit their bids in one envelope marked with Tender Name and Reference.

17. Evaluation

18.1 IRK will examine the prequalification documents to determine completeness, general orderliness, sufficiency in responsiveness, price and product brand.

18.2 The potential contractor shall not contact IRK on matters relating to their bid from the time of opening to completion and official communication sent to them. Any effort by the potential contractor to influence IRK in the evaluation shall result in disqualification.

18.3 Prequalification will be based on meeting the minimum criteria regarding the applicant's legal status, general and experience, personnel and financial position as demonstrated by their responses as set in clause

18.4 The applicants **MUST** have registered offices and IRK reserves the discretion of visiting physical

premises from which the applicant conducts business if so desired to confirm existence and capability to execute the contract.

18.5 Due diligence shall be undertaken, and any bidder found to be in breach by providing false information shall be disqualified.

19. Employment of Minors

The Contractor shall not employ children in executing the contract. The Contractor shall observe international conventions relating to child labor namely the UN Convention No.182 on worst forms of child labor and convention No. 138 on the minimum age for admission to employment.

20. Criminal Act

The Contractor undertakes to comply with all applicable laws and to ensure that it does not engage in any kind of criminal activity including but not limited to bribery, fraud, corruption, terrorism and to maintain ethical business practices as well as not to commit any Prohibited Acts defined as: -

i) To offer, promise or give any person a financial or other advantage.

ii) To request, agree to receive or accept any financial or other advantage not expressly provided for as an inducement or a reward for the performance of any function or activity in connection with this Agreement.

BID EVALUATION RATING SCALE

MANDATORY REQUIREMENTS

No	Description	Mandatory Evaluation (YES/NO)
1	Company Registration Certificate – Mandatory	
2	CR12- issued within the last 3 months	
3	Duly filled forms (Organization details, Grounds for Mandatory Rejection, Grounds for Discretionary rejection form, Bid Value, Financial and declaration)	
4.	Valid Registration with the county government/valid and genuine business permit.	
5.	Certified copy of Valid registration for National Construction Authority NCA 7 and above - Water works	
6	Certified copy of Valid Registration for National Construction Authority (NCA7 and above)- Electrical Works	
7	Certified copy of Active Solar PV Contractors/Vendor License with Energy and Petroleum Regulatory Authority (EPRA).	
8	Active KRA PIN – With VAT Obligation	
9	Valid Tax Compliance	
10	Copy of ID/ Passport of the directors	
11	Serialization of the Bid – Bidders shall sequentially serialize all pages of the	

Note: Bids that do not include any of the documents listed as mandatory will not be considered for either the technical or financial evaluation**.**

TECHNICAL ANALYSIS

No.	Description		Score
1	Brief Company Profile with verifiable physical location/address		10
2	List of Key Equipment	Owned (Max 15 marks)	20
		50% Owned – 50% leased (Max - 7)	
		100% leased (Max. 5 Marks)	
3	List of Key Personnel	(Degrees- 10, HNDs – 6, Diplomas – 4)	20
4	Number of Years in Operation at least 5 years	1yr - 2 marks 2yrs- 4 marks 3yrs- 6 marks 4yrs- 8 marks 5yrs & above – 10 marks	10
5	Evidence of past similar works – Contract, LPO & Completion certificates.	-5 or More = (Max. 30 marks	30
		4 LPOs, contracts & completion cert. (Max 24 marks)	
		3 LPOs, contracts & completion cert. (Max 18 marks)	
		2 LPOs, contracts & completion cert. (Max 12)	

		1 LPO/contracts/completion cert (Max 4 Marks) Note: the contract/LPOs/completion certificate must be readable, signed and stamped by the issuing authority for authentication.	
6	Detailed work plan and methodology statement	Detailed workplan and methodology statement: Work plan demonstrating flow of work from inception to site hand over) (Max 3 pages)	10
	TOTAL	**100**	

Note: Bids that do not score 80% or above in the technical analysis will be automatically disqualified and will not be considered for financial evaluation.

FINANCIAL ANALYSIS

No.	**Description**		**Maximum**
1	Certified Bank statement for the past six months.	Certified bank statement for 6 months.	25
2	Evidence of a Certified letter of credit from reputable bank.	Certified letter (signed & stamped) of credit.	25
	TOTAL		**50**

Note: Bids that do not score 75% or above in the financial analysis shall not be considered for due diligence.

Tender Schedule

Task	**Tentative Tender Schedule**
Advertising of tender	24th October 2024
Closing of tender	Thursday, 7th November 2024 11.00 AM
Opening of tender	Thursday, 7th November 2024 11.00 AM
Evaluation	8th – 12th November 2024
Award	9th -10th November 2024

MANDATORY QUESTIONNAIRE

A: Organization and Contact Details

Full Name of Organization			
Date of Registration			
Registration Certificate Number			
Street		**Road**	
Address		**Code**	
Town			
Email		**Telephone No.**	
PIN No.			
Name of Parent Company			
Type of Organization		A Public Limited Company	
		A Limited Company	
		A Limited Liability Partnership	
		Other Partnership	
		Sole Trader	
		Other (Please Specify)	

Name of Owners

Name	**ID/Passport No.**	**Nationality**

DETAILS FOR CONTACT PERSON

Contact details for enquiries about this PQQ/Business Issues	
Name of Staff	
Address	
Post Code	
Town	
Phone	
Mobile	
Email	

B - Grounds for Mandatory Rejection

Important Notice:

In some circumstances IRK is required by law to exclude you from participating further in a procurement. If you cannot answer 'no' to every question in this section it is very unlikely that your application will be accepted, and you should contact us for advice before completing this form.

Please state 'Yes' or 'No' to each question.

Has your organization or any directors or partner or any other person who has powers of representation, decision or control been convicted of any of the following offences?	**Answer**
(a) A crime	
(b) Corruption	
(c) The offence of bribery;	
(d) Fraud within the meaning of:	
i) Money laundering	
ii) Any other offence	

Has your organization fulfilled obligations related to the payment of social security contributions or the payment of taxes in accordance with the legal? Answer with a "**Yes**" or "**No**"	

C - Grounds for Discretionary Rejection

Important Notice:

IRK is entitled to exclude you from consideration if any of the following apply but may decide to allow you to proceed further. If you cannot answer 'no' to every question it is possible that your application might not be accepted. In the event that any of the following do apply, please set out (in a separate Annex) full details of the relevant incident and any remedial action taken subsequently. The information provided will be taken into account by IRK in considering whether or not you will be able to proceed any further in respect of this procurement exercise.

Please state 'Yes' or 'No' to each question.

Is any of the following true of your organization?	
(a) Is bankrupt or under receivership or bankruptcy restrictions order made against the organization	
(b) Is insolvent,	
(c) Is the subject of an order by the court winding up otherwise than for the purpose of bona fide reconstruction or amalgamation, or had a receiver, manager or administrator on behalf of a creditor appointed in respect of the company's business or any part thereof or is the subject of similar procedures under the law of any other state?	
Has your organization	
(a) been convicted of a criminal offence relating to the conduct of your business or profession;	
(b) committed an act of grave misconduct in the course of your business or profession;	
(c) failed to fulfil obligations relating to the payment of social security contributions	
(d) failed to fulfil obligations relating to the payment of taxes under the	
(e) been guilty of serious misrepresentation in providing any information required	

D – Bid Value & Duration of Supply

Bid Value for the Work	*Kshs.* _____
Payment Terms	
Duration of Delivery	
Remarks	

E - Financial

1	**BANK INFORMATION**	
1.1	*Bank*	
	Branch	
	Account Name	
	Account Number	
	Swift Code	
	Letter From Bank Confirming Account & Credit Facility	

F	Declaration	Declaration

2.	I declare that to the best of my knowledge the answers submitted in this bid document are correct. I understand that the information will be used in the process to assess my organization's suitability to be invited to tender for Islamic Relief's requirement and I am signing on behalf of my organization. I understand that the Contracting Authority may reject this bid if there is a failure to answer all relevant questions fully or if I provide false/misleading information. By signing the bid document, I certify that all of the above statements are accurate and factual. **FORM COMPLETED BY**	
2.1	Name:	
2.2	Position:	
2.3	Signature:	
2.4	Date:	
2.5	Stamp:	

ANNEX I: B.O.Q

ISLAMIC RELIEF KENYA

Kirichwa Road
P.O Box 417-00200, KNH
Nairobi, Kenya

Tel: 0727531220/0734740074
Email: info@islamic-relief.or.ke

Ref:
Date:

BILL OF QUANTITIES FOR REGULARIZATION, EXPANSION AND OTHER ASSOCIATED WORKS AT WALDIRI VILLAGE EARTHPAN IN MANDERA NORTH, MANDERA COUNTY

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**BILL No.1: PROJECT SIGNBOARD**				
	Provide, fabricate and install MS Signboard (1.5mx1.5m) raised 1.5m above ground complete with appropriate paintwork/artwork, Islamic Relief Logo and Project details on either side. Artwork to be done via stencil pasting and not freehand as shall be directed by the Engineer.	Item	1		
	TOTAL CARRIED TO SUMMARY				
2	**BILL No. 2: SITE CLEARANCE**				
	Clear site of all trees, tree stumps, shrubs and grass inside and around the existing pan, embankment and proposed site. Dispose-off the construction site as directed by the Engineer	SM	25056		
	TOTAL CARRIED TO SUMMARY				
3	**BILL No. 3: EXCAVATION AND EARTHWORKS**				
3.1	**Expansion, Reshaping and Regularization of the Pan Reservoir**				
	Commence regularization, expand the exisitng pan reservoir volume and excavate pan from the new edge to achieve top measurements of 104m x 74m x 3m while maintaining side slopes gradient 1:3 so as to achieve a uniform base that measures 86mx56m. Cost to include excavation in hard ground.Apply cut-and fill to construct side slope and berm section where applicable. Maintain a berm width of 5m all round. Berm section and side slopes to be compacted in layers adequately with water and roller traffic.	CM	13,282		
3.2	**Embankment Construction**				

	Haul material from pan through the buffer zone that is specified and construct an embankment around the excavated pan, Height 2.0 m, crest width 4m and side slopes 1:3 with adequate anchorage into the existing surface.The existing shallow embankment material to be hauled to form part of the new embankment.Spreading to be done in layers of 300mm and adequately compacted using roller traffic.	CM	10,124		
3.3	**Disposal**				
	Provide for hauling of excess material to spoil from the reservoir/pan base and dispose it at an identified site as directed by the Engineer.	CM	4,000		
3.4	**Silt Trap**				
	Excavate in normal soil to create silt trap with outer dimensions 30m X 15m X 2.0m at the convergence of the inlet channels and shape, trim the side slopes and haul to spoil the material as directed.	CM	900		
3.5	**Spillway Channel**				
	Excavate spillway channel of 5m wide, 0.5m deep and at least 200m length and cart away to spoil as directed.	CM	500		
3.6	**Inlet Channel**				
	Excavate inlet channel of at least 400m long x 5m wide x 0.5m high connecting the silt-trap and reservoir with channel bed extending to the reservoir bottom as directed by the supervising Engineer.	CM	1000		
	TOTAL CARRIED TO GRAND SUMMARY				
4	**BILL No. 4: DAM LINER**				
	Supply, deliver to site, install and spread on all faces of the main reservoir; 0.5mm U-V treated HDPE Geomembrane Dam Liner	SM	9,300		
	TOTAL CARRIED TO GRAND SUMMARY				
5	**BILL No. 5: AUXILLARY WORKS AND EROSION CONTROL**				
5.1	**Spillway Sill**				
	Undertake construction of 6m long by 5m wide Reinforced Concrete spillway to protect against erosion as directed by the Engineer while raising spillway bed by 400mm and providing for construction of concrete walling on spillway sides and stone riprap protection along contact areas with existing earth embankment	Item	1		
5.2	**Ripraps**				

A	Place approved handpacked 150mm thick riprap on spillway; to be compacted and jointed with mortar on the channel bed section to the satisfaction of the Engineer.	SM	150		
B	Place approved handpacked 150mm thick riprap on inlet channel; connecting the silt-trap and reservoir with channel bed extending to the reservoir bottom. To be compacted and jointed with mortar to the satisfaction of the Engineer.	SM	250		
5.3	**Gabions**				
	Provide material and allow for Installation of gabion mattresses layers measuring 3mx1mx1m complete with rockfill at the inlet channel connecting the silt-trap to both the reservoir and channel bed. Cost to include surface preparation, placement and plastering/finishing works as directed by the Engineer.	No.	40		
	TOTAL CARRIED TO GRAND SUMMARY				
6	**BILL No. 6: FENCING AND ENVIRONMENTAL PROTECTION**				
6.1	Excavate post holes of size 300mmm diameter and 450mm deep to receive concrete poles.	No.	188		
6.2	Supply and fix 63x63x4mm cranked angle line steel poles, 3m long/high placed at 3 metres apart c/c including bracing posts fabricated with 6 No. 10mm diameter through holes for wire or bolt drilled at same points on each fencing post to receive strainer wires. The strut angle line poles placed at corners and after every 5 poles (15m) and ditto The insitu mass concrete surround to be compacted.	No.	188		
6.3	Provide, place, compact and vibrate 1:2:4 concrete to the post holes.	CM	6		
6.4	Provide and fix heavy gauge 14 chain link fences, (18m long roll) 2.1m/7ft high to be fitted with appropriate strainers on the posts.	SM	1,158		
6.5	Provide and fix 6 rounds heavy gauge 16 barbed wire (610m long roll) with 3 rows at top slant of the posts and the 3 rows along the straight vertical length.	M	3306		
6,6	Provide, place, compact and vibrate insitu 1:3:6 mass concrete to the base of the Chainlink within 100mm above the existing ground level.	CM	11		
6.7	Construct 300mmx300mmx2500mm long reinforced concrete gate columns. Cost to include footing excavations, concreting, reinforcement, formworks and curing. Superstructure Concrete surfaces to be fully plastered and painted with two coats gloss paint (perch blue) to Engineer's approval.	No.	2		

6.8	Provide materials, fabricate and install purpose made steel grilled double leaf security gate overall size 5000x2000mm high in two equal opening leaves each size 2500x2000mm high with external frame of 50x50x3mm SHS spaced 1000mm c/c vertically and 1250mm c/c horizontally both internally and externally. Internal vertically bracings of 25x25x3mm spaced @150mm c/c horizontallyall fixed to external frame by wielding including all hinged joints. A pedestrian door 900mmx1900mm high to be assembled, wielded to shape and fixed to position on the right eave of the gate. Provide 250mm wide MS strip across the entire gate horizontally. Complete Gate finished with heavy gauge wiremesh wielded on the surface and locking devices to be supported by RC Columns specified above. All to be painted with two coats of approved primer and finished with final coat first grade gloss paint (perch blue). All to design drawing specifications.	No.	1		
	TOTAL CARRIED TO GRAND SUMMARY				
7	**BILL No. 7: INTAKE TOWER AND DRAW-OFF SYSTEM**				
7.1	**Intake Structure/ Tower**				
	Construction of vertical intake filter cage to off take pipe (steel cage 1.5mx1.5mx3m high with concrete base) with graded ballast and hardcore around the perforated 6" uPVC Class D pipe 3m length with weldmesh wire, 3”angle line frame, end caps and fittings as directed.	Item	1		
7.2	**Valve Chamber**				
	Construct masonry water control unit of 1mx1m internal dimensions x 5m depth (including a main gate valve (6") and descending steps secured with lockable steel manhole (a steel lockable manhole cover size 0.6m x 0.6m) infront of the pumping well including a padlock as directed by the supervising engineer. Cost to include excavation into hard/rocky ground	Item	1		
7.3	**Pumping Well**				
	Provide all materials and construct a well whose depth is 10m and a width of 1.5m diameter. Cost provision should be made for digging in hard/rocky ground. The wall should be made of well compacted reinforced concrete (200mm thick) with D-12 bar to be used in all cases @ 200mm c/c and water-proofed accordingly. Climbing steps to be incorporated @ 300mm on one side cut from D 12 bar. Include a lockable/removable well RC cover (500mmx500mm width). Provide an opening for pump installation not more than 150mm as per	Item	1		

	provided design and instructed by the supervising engineer.				
7.4	**Trenching and pipeworks**				
A	Excavation of the main outlet pipe trench (0.5mx5mx60m) from steel cage to valve chamber	CM	150		
B	Pipework connecting the intake structure and the pumping well through the valve chamber; perforated pipe and 150mm dia uPVC Class D, 60m long. Including anti-seepage concrete collars 750mm x 750mm x 200mm thick	M	60		
C	Excavate and backfill distribution pipeline trench (after laying of pipe) 450mm wide and between 0.6m and 1.5m deep for accommodating distribution pipe.	CM	405		
D	Provide and lay 2" uPVC Class C for distribution mains from pumping well to connect to water kiosk and troughs.	M	600		
E	Supply of assorted fittings and other accessories	Item	1		
F	Construct 1200 x 1200 x900 Valve Chambers with Lockable Steel cover at kiosks and tank connection complete with control valves and adjoining fittings	Item	4		
	TOTAL CARRIED TO GRAND SUMMARY				
8	**BILL No. 8: EQUIPPING AND SOLARIZATION OF THE PUMPING WELL**				
	Supply and delivery to site, installation and commission test the following:				
8.1	Dayliff DS14-7 2.2 KW Pump End or its approved equivalent	Set	1		
8.2	Dayliff DSM 2.2 KW 3PH Sub-Motor	Set	1		
8.3	Dayliff SV3 3.7KW 3PH Sunverter	Set	1		
8.4	Dayliff 2" Standard 3M pipe including installation sundries	No.	4		
8.5	Dayliff 2" Adaptor Set	No.	1		
8.6	Borehole cover 2"x6" complete with fittings	No.	1		
8.7	Adaptor Box 4x4x3mm	No.	1		
8.8	PVC Pipe 25mm Class D	No.	2		

8.9	Crystalline Photo Voltaic Solar Modules connected in panels of 200W, 24Vdc	No.	16		
8.10	Dayliff PVDISC1000/16A 2ST PV Disconnect Switch	No.	1		
8.11	Earth rod complete with clamp	No.	1		
8.12	Lightning Arrestor	No.	1		
8.13	Copper Earth Cable 6mm2	M	10		
8.14	PVC Cooling sleeve "4"	No.	1		
8.15	2.5mm2- 4core UG cable	M	15		
8.16	1.5mm2- 2core UG cable	M	20		
8.17	2.5mm2x4 core Standard PVC Flat submersible Drop Cable	M	15		
8.18	Londex standard Dual Core Cable	M	15		
8.19	Twin Flat 4mm Cable with Earth	M	15		
8.20	GS sunverter Enclosure 1000x500x350mm	No.	1		
8.21	Appropriate stand for the panels made of 75mm stand pipes, 50 mm SHS members, stub Column bases, 4m Height to support the panels, guard rails, permanent and movable ladders as shall be approved by the PM	Item	1		
TOTAL CARRIED TO GRAND SUMMARY					
9	**BILL No. 9: CONSTRUCTION OF 2 ANIMAL TROUGHS**				
9.1	Prepare site by stripping top 150mm of soil to remove all debris inclding sand (if any) from site and cart away to spoil.	SM	54		
9.2	Excavate for foundation strip commencing at stripped levels depth not exceeding 1.50m deep.	CM	28		
9.3	Extra-over for excavation in hard rock	CM	1		
9.4	Remove surplus excavated material from site	CM	17		
9.5	Backfill around foundations	CM	11		
9.6	Provide for 200mm thick approved hardcore filling spread, well rammed and compacted in 150mm layers to receive concrete surface bed.	CM	8.4		
9.7	Treat hardcore surface with approved insecticide	SM	41		
9.8	50mm Class 15 (1:3:6) mass concrete to blinding layer under foundations	CM	0.5		
9.9	Provide 50mm Class 15 (1:3:6) mass concrete to blinding layer on hardcore surfaces	CM	1.7		
9.10	Vibrated reinforced Class 20/20 (1:2:4) to strip foundations	CM	2		
9.11	Vibrated reinforced Class 20/20 (1:2:4) to 150mm thick wall	CM	1.4		
9.12	Vibrated reinforced Class 20/20 (1:2:4) to 100mm thick floor slab	CM	4.2		

9.13	Mesh fabric reinforcement ref. No. A142 laid in floor slab with minimum 150mm side allowance	SM	41		
9.14	High tensile reinforcement bars in assorted sizes	KG	400		
9.15	Formwork to sides of foundation strip girth 150-225mm	M	31		
9.16	Formwork to edges of floor slab girth not exceeding 75mm	M	32		
9.17	Formwork to sides of walls	SM	39		
9.18	150mm thick solid concrete block walling	SM	3		
9.19	15mm thick plaster, cement and sand mortar (1:3) to internal side of wall with water proof cement steel trowelled to smooth finish.	SM	10		
9.20	15mm thick plaster, cement and sand mortar (1:3) to external side of wall with water proof cement steel trowelled to smooth finish.	SM	5		
9.21	Hack surrounding ground, provide and cast 75mm thick C20 mass Concrete benching laid to appropriate fall on all directions at the animal stepping platform round the trough	SM	23		
9.22	Provide 25mm diameter GI Class B inlet pipe chased through masonry wall 300mm long with and including stop cork.	No.	4		
9.23	25mm diameter inlet pipe	No.	2		
9.24	32mm diameter PVC, Class D draw off pipe 300mm long with and including gate valve	No.	1		
	Sub- Total for 1 Animal Trough				
	TOTAL FOR 2 TROUGHS (Shoats & Cattle)	No.	2		
	TOTAL CARRIED TO SUMMARY				
10	**BILL No. 10: RAISED CONCRETE PLATFORM WITH TANK AND ADJACENT COMMUNAL TAPSTAND**				
10.1	**ELEMENT No. 1: CONSTRUCTION OF RAISED CONCRETE PLATFORM WITH TANK**				
A	***CONSTRUCTION OF RAISED CONCRETE PLATFORM***				
	Diameter of the concrete base : 2.8m (externally), ***Elevation above ground level: Max 1.5m,*** ***Depth of the foundation walling : min 1M b.g.l***				
1	Excavate to reduce levels 300mm deep, starting from the stripped levels	SM	12		
2	Excavate trench foundation upto 1.0m deep or as directed starting from stripped or reduced levels	CM	12		

3	Hardcore or other approved filling, as described starting from stripped or reduced levels with 25mm thick quarry dust layer to receive surface bed	CM	12		
4	100 gauge polythene or other equal and approved damp-proof membrane, laid over blinded hardcore (measured separately) with 300mm side and end laps	SM	10		
5	75mm C15 concrete blinding under foundations.	CM	1		
6	Reinforced concrete class (20) as described, in Foundations	CM	1.2		
7	Reinforced concrete class (20) as described, in 150mm thick slab	CM	1.5		
8	Y10mm reinforcement bars. The cost to include binding wire and ring bars.	KG	85		
9	Sawn formwork, as described, to edge of slab, over 75mm but not exceeding 150mm high.	M	16		
10	Sawn formwork, as described, to sides of foundation strips	SM	2.8		
11	200 mm thick walling in natural coursed stone (5 courses), bedded and jointed in gauged mortar 1:3	SM	15.7		
12	12mm (minimum) two coat lime plaster as described to Concrete or masonry surfaces externally	SM	14		
13	15mm Cement and sand (1:3) screeds	SM	9		
B	***INSTALLATION OF 10,000L PVC TANK (to supply the Animal Troughs)***				
1	Supply and installation of PVC tanks of minimum capacity 10,000L. Strictly Roto / Ken tank.	No.	1		
2	Long nipple 2"	No.	2		
3	2" dia GI back nuts, threaded	No.	2		
4	Allow for branding of the tanks with IRK logo and wordings	Item	1		
5	Provide 50mm GI inlet/outlet pipes class "B" with and including joining fittings to tank and fix as described	M	6		
6	Provide and Install 50mm GI Gate Valves- Pegler type	No.	2		
10.2	**ELEMENT No.2: CONSTRUCTION OF COMMUNAL TAPSTAND**				
A	***SUBSTRUCTURE WORKS***				
1	Excavate to remove top vegetable soil and heap as directed on site; average depth of 200mm	CM	1		
2	Excavate foundation trenches commencing from reduced level: to stable formation:	CM	1		
3	Return, fill and ram selected soil in foundations	CM	1		

4	Remove surplus spoil from site to a location approved by the Engineer on site.	CM	1		
5	Plain concrete class 15/20 :in 100 mm Thick blinding to strip foundations	SM	1		
6	Reinforced concrete class 20/20: vibrated: in 125 mm thick floor bed	CM	1		
7	Mesh reinforcement - weldmesh heavy gauge: in floor slab: including all necessary supports: allow for laps, Measured net	SM	5.4		
8	Sawn formwork: to Edges of surface bed: over 75 mm but not exceeding 150mm girth	M	10		
9	200 mm Thick natural local stone foundation walls: bedded and jointed in cement and sand (1:4) mortar depth n.e 1500. Include hoop iron reinforcement at every course and water proofer	SM	7.6		
10	Hardcore 300mm thick Hardcore of approved inert material: well watered and compacted in 150 mm thick (max) layers.	SM	1.7		
11	Selected murram fill; imported; well watered and compacted in 50 mm thick (max) layers	SM	3.4		
12	Gauge 1000 polythene damp proof membrane	SM	5.4		
B	***SUPERSTRUCTURE WORKS***				
1	200 mm Thick natural local stone foundation walls: bedded and jointed in cement and sand (1:4) mortar depth n.e 1500. Include hoop iron reinforcement at every course and water proofer	SM	6.2		
2	Wall Finishes: 9 mm first coat of cement/lime putty/sand (1:2:9): 3 mm second coat of cement/lime putty/sand (1:1:6): steel trowelled: on masonry or concrete: to Walls: externally as directed by the Engineer	SM	7.6		
3	Floor finishes: Cement and sand (1:4) screed: to hacked floors: in 25 mm thick floor at a slope - 0.1%	SM	6.4		
C	***PLUMBING WORKS - Supply and fix the following:***				
A	25mm Gate Valve	No.	3		
B	25mm GI Union	No.	3		
C	25mm Barrel nipple	No.	3		
D	25mm GI elbow	No.	3		
E	25mm GI pipe 600mm long	No.	3		

F	GI reducing Tee (50/25)	No.	3		
G	50mm end plug	No.	2		
H	PVC Valve Socket 50mm	No.	1		
I	50mm GI pipe - 500mm long	No.	2		
J	50mm GI elbow	No.	1		
K	DN 50 pegler gate Valve	No.	1		
D	***DRAINAGE***				
1	**Catch pit**				
A	Excavate for 400mm squarex900mm catch pit to detail	CM	0.2		
B	100mm thick block lining to the sides of the catch pit	SM	2		
C	100mm thick mass concrete for catch pit base slab	CM	0.1		
D	20mm thick plaster mixed with Sika or equivalent water proofing admixture to walls surfaces internally .	SM	2		
E	Catch pit grating made from wielded sections to form 25mm square mesh on 50mm steel frame.	Item	1		
2	**Soak Pit**				
A	Prepare site by stripping top 150mm of soil to remove al debris including sand (if any) from site and carting away spoil	SM	1		
B	Pit excavation commencing at reduced leels depth not exceeding 1.50m deep.	CM	1.5		
C	Ditto 1.50 - 3.00 metres deep	CM	1.5		
D	Remove surplus excavated material from site	CM	3		
E	Graded approved free draining hard-core/ rubble stone filling the soak pit	CM	1		
F	100mm thick cover slab	CM	0.2		
G	10mm reinforcement bars	KG	13		
H	Sawn formwork to sides and soffits of slab	SM	1.4		
I	200mm Drainage PVC pipe for inlet and outlet connections including adjoining fittings	LM	10		
3	**Painting and decoration**				
A	Plastic emulsion paint on all masonry and concrete surfaces	SM	4		
B	Provide gloss piant to all plastered surfaces	SM	4		
C	Provide for IRK branding Artworks to Engineer's details	Item	1		
	TOTAL CARRIED TO GRAND SUMMARY				
11	**BILL No. 11: CONSTRUCTION OF 1 WATER KIOSK WITH OVERHEAD TANK**				

11.1	**Excavation and Earthworks**				
A	General excavation to remove top soil to an average depth of 250mm	SM	17		
B	Excavation for wall footing depth not exceeding 1200mm deep	CM	10		
C	Ditto to column bases	CM	7		
D	Excavation for front area depth not exceeding 250mm	CM	2		
E	Backfill and ram	CM	10		
F	Cart away surplus excavated material and deposit at recommended area.	CM	2.5		
G	300mm thick approved hardcore, well compacted in layers not exceeding 150mm and blinded using 50mm murram/ quarry dust	SM	12		
H	Gauge 1000 polythene Damp proof 50mm murram blinding	SM	12		
11.2	**Masonry Work**				
A	200mm thick natural stone walling to substructures in 1:3 sand/cement mortar. Rate to include hoop iron reinforcement at every course.	SM	12		
B	200mm thick natural stone walling to superstructures in 1:3 sand/cement mortar. Rate to include hoop iron reinforcement at every course.	SM	16		
C	200mm wide ventilation blocks	SM	0.5		
D	150mm wide DPM to walls	No.	13		
11.3	**Concrete Work**				
A	Concrete grade 20/20 - 400 mm thick to Plinth	CM	0.3		
B	Concrete grade 20/20 - 100mm thick slanting front area	CM	0.6		
C	Reinforced concrete grade 25/20 - 125mm thick floor slab	CM	1.4		
D	Reinforced concrete grade 20/20 - 150mm thick roof slab	CM	2		
E	Reinforced concrete grade 20/20 to strip footing	CM	1.1		
F	Reinforced concrete grade 25/20 to column base	CM	3		
G	Reinforced concrete grade 25/20 to columns	CM	1.4		
H	Reinforced concrete grade 25/20 to beam	CM	1.3		
11.4	**Concrete Ancillaries**				
A	Sawn formwork to Sides of strip footing	SM	6		
B	Sawn formwork to Edges ground slab 125mm wide	LM	14		
C	Sawn formwork to sides and Soffits of 400mm deep plinth	SM	2		

D	Sawn formwork to edges of roof slab	LM	14		
E	Sawn formwork to Underneath roof slab, including props	SM	11		
F	Sawn formwork sides and soffits of beam 450mm deep	SM	6		
G	A142 mild steel reinforcement	SM	15		
H	8mm reinforcement bars	KG	60		
I	10mm reinforcement bars	KG	34		
J	12mm reinforcement bars	KG	50		
K	16mm reinforcement bars	KG	60		
11.5	**Doors and Windows**				
A	1000x2000mm steel door including locks and hinges to details	No.	1		
B	1000x1000mm steel swing window including locks and hinges to details	No.	1		
C	Built in table with two lockable drawers	No.	1		
D	Meter Box 220x220x300mm Lockable	No.	1		
11.6	**Pipe and Fittings**				
	All pipes to be galvanised iron with screw				
A	32mm inlet pipe	m	10		
B	32mmdia. Elbows	No.	4		
C	32 mm dia. Valve sockets	No.	2		
D	32mm dia. Gate Valve as Peglar	No.	2		
E	32x20mm Reducing Tee	No.	4		
F	32mm end Plug	No.	1		
G	32mm union	No.	4		
H	32mm short nipple	No.	2		
I	20mm union	No.	4		
J	20mm short nipple	No.	8		
K	20mm ball valve	No.	1		
L	20mm elbow	No.	4		
M	32mm Peglar or approved Water Meter	No.	1		
N	20mm dia. Gate valve as Peglar	No.	4		
11.7	**Finishes**				
A	Plastering to all masonry and concrete surfaces (internally and externally)	SM	32		
B	Provide three coats of gloss piant to all plastered surfaces	SM	32		

11.8	**Drainage and Water Supply**				
A	***Catch pit***				
1	Excavate for 400mm squarex900mm catch pit to detail	CM	0.2		
2	100mm thick block lining to the sides of the catch pit	SM	2		
3	100mm thick mass concrete for catch pit base slab	CM	0.1		
4	20mm thick plaster mixed with Sika or equivalent water proofing admixture to walls surfaces internally .	SM	2		
5	Catch pit grating made from wielded sections to form 25mm square mesh on 50mm steel frame.	Item	1		
B	***Soak Pit***				
1	Prepare site by stripping top 150mm of soil to remove al debris including sand (if any) from site and carting away spoil	SM	1		
2	Pit excavation commencing at reduced leels depth not exceeding 1.50m deep.	CM	1.5		
3	Ditto 1.50 - 3.00 metres deep	CM	1.5		
4	Remove surplus excavated material from site	CM	3		
5	Graded approved free draining hard-core/ rubble stone filling the soak pit	CM	1		
6	100mm thick cover slab	CM	0.2		
7	10mm reinforcement bars	KG	13		
8	Sawn formwork to sides and soffits of slab	SM	1.4		
9	200mm Drainage PVC pipe for inlet and outlet connections including adjoining fittings	LM	10		
C	***Plastic Tank***				
1	Provide and install 5000L approved plastic tank on top of the kiosk roof complete with all fitting (its nipples, back nuts and float/ball valve) and associated piping.	No.	1		
2	Provide for branding with IRK Logo and wording as will be directed by the Engineer.	Item	1		
	TOTAL CARRIED TO GRAND SUMMARY				
12	**BILL No. 12: CONSTRUCTION OF 1 No. TWIN VIP LATRINE BLOCKS**				
12.1	**ELEMENT No.1 :SUBSTRUCTURES WORKS (All Provisional)**				
A	**Site Clearance**				
	Clear over site off grass, shrubs and all vegetation; cart away as directed	SM	14		
B	**Excavations**				
1	Excavate over site to reduce levels commencing from stripped level average 300mm and spread on site average 10metres away	CM	5		

2	Excavate for strip foundation starting from reduced level not exceeding 1.0m deep and cart away as directed	CM	12		
3	Return, fill -in and ram selected excavated material	CM	11		
4	Remove and cart away form site surplus excavate material as directed	CM	6		
C	**Disposal of Waste**				
	Keep all excavations free form all waste including spring and running water	ITEM	1		
D	**Planking and Strutting**				
	Uphold the sides of all excavations	ITEM	1		
E	**Filling**				
1	Hard core filing in making up levels not exceeding 300mm thick, depositing and compacting in layers of 125mm maximum thickness	SM	10		
2	50mm thick murram blinding to surfaces of fill	SM	10		
	CARRIED TO COLLECTION (1)				
F	**Anti-Termite Treatment**				
	TERMIDOER or other equal and approved insecticide with 10-year guarantee to surfaces of fill and tops of foundations	SM	10		
G	**Blinding**				
	50mm C15 concrete blinding to foundations	SM	12		
H	**Concrete**				
	In-situ concrete class 20/20mm vibrated				
A	Strip footing	CM	3		
B	150mm thick bed including ramp	CM	2		
I	**Reinforcement**				
	Bars, high yield steel, cold worked to BS4461 including bends, hooks, tying wire and distance block				
A	10mm bars	KG	76		
J	**Fabric B.S. 4483**				
	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter (measured net -no allowance made for laps(including bends, tying wire and distance blocks	SM	10		
	CARRIED TO COLLECTION (2)				
K	**Formwork**				
	Sawn formwork to in situ concrete as described:-				
A	to sides; vertical or battering of strip foundations.	SM	10		
B	Edges of ground floor slab; 75 to 150mm wide	LM	16		

L	**Walling**				
	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	SM	18		
M	**Damp proofing**				
	Polythene; 1000 gauge, 150mm laps (no allowance made to laps), horizontal; 1 no. layer laid on murram blinding	SM	12		
	CARRIED TO COLLECTION (3)				
ITEM	**DESCRIPTION**				**AMOUNT**
	Collection from 1				-
	Collection from 2				-
	Collection from 3				-
	TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY				0
12.2	**ELEMENT No.2 :SUPERSTRUCTURES**				
A	**Insitu concrete; reinforced; class 20 / (20mm); vibrated**				
	Beams	CM	1		
B	**Reinforcement**				
	Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks				
1	8mm bars	KG	12		
2	10mm bars	KG	28		
C	**Sawn formwork to in situ concrete as described:-**				
	to sides and soffits of beams.	SM	5		
D	**Walling**				
1	200mm thick approved local natural stone; roughly squared to superstructure walling; bedding and jointing in cement sand (1:3) mortar	SM	36		
2	200mm ventblock walling	SM	1		
	TOTAL FOR SUPERSTRUCTURE (FRAME/WALLING) CARRIED TO SUMMARY				
12.3	**ELEMENT No.3 : ROOF CONSTRUCTION**				
A	**Roof Covering**				
	Galvanized corrugated Sheet roofing; 30 gauge; Pre-painted				
	Roof covering not exceeding 450 from horizontal; fixing to timber structure (m/s) with roofing nails and neoprene washers J bolts nuts neoprene washers and caps.	SM	15		
B	**Carpentry**				

	The following in sawn celcured cypress; all provisional				
1	100 x 50mm rafters	LM	13		
2	100 x 50mm wall plate ragbolted at 1200mm centres with 12mm diameter bolts (m/s) 100 x 50mm wall plate ragbolted at 1200mm centres with 12mm diameter bolts (m/s)	LM	8		
3	75 x 50mm sawn cypress purlins	LM	20		
	Wrot cypress, prime grade				
4	200 x 25mm thick fascia board	LM	15		
5	Apply gloss paint to Fascias; 200 to 300mm girth; external	LM	15		
	TOTAL FOR ROOF CONSTRUCTION CARRIED TO SUMMARY				
12.4	**ELEMENT No.4 :DOORS**				
	Steel Doors				
A	Provide MS Pedestrian steel door 800mmx2100mm high to be assembled, wielded to shape and fixed to position on either entrance of the latrine block. To details. Cost 2 include 3 coats of depp blue anti-rust paint on all surfaces	No.	2		
B	Rubber door stop complete with 38 mm rawl bolt	No.	2		
	TOTAL FOR DOORS CARRIED TO SUMMARY				
12.5	**ELEMENT No.5 : FINISHES**				
A	**Wall Finishes**				
	Plaster; 12mm thick 2 No. coatwork, 9mm first coat of cement sand (1:6); *3mm second coat of cement and lime putty (1:10); steel trowelled to concrete or brickwork base generally to: -*				
	Walls; internal & external	SM	73		
B	**Floor finishes**				
	38mm thick one coat backings; steel trowelled smooth to concrete base finished with redoxide cement; to floors level	SM	12		
C	**Painting and Decorations**				
	Prepare and apply three coats of first quality plastic emulsion paint to: -				
	Plastered walls and beams	SM	73		
D	**Islamic Relief Branding Artwork**				
	Branding with Islamic Relief Logo and Project Details as directed	ITEM	1		
	TOTAL FOR FINISHES CARRIED TO SUMMARY				
12.6	**ELEMENT No.6 :PIT EXCAVATION AND PLUMBING**				
A	**Excavtion and Earthworks**				
1	Clear the site of the proposed works of all vegetation, debris, temporary structures and cart away from site	SM	2		

2	Excavate oversite n.e 1.50m deep from reduced level. Cost to include excavation in rocky/hard ground.	CM	3		
3	Ditto 1.5-3.0 deep	CM	3		
4	Ditto 3.0 - 4.5 deep	CM	3		
5	Ditto 4.5-6.0 deep	CM	3		
6	Ditto 6.0-7.5 deep	CM	3		
7	Ditto 7.5-9.0 deep	CM	3		
B	**Rubble stone walling**				
	400mm thick rubble wall lining for pit to a maximum depth of 1.5m	SM	9		
C	**RC cover slab**				
1	150mm thick C20 concrete slab	CM	1		
2	Formwork to edges of slab	LM	6		
3	10mm bars reinforcement	KG	22		
D	**Plumbing Installation**				
1	Construct regular masonry squat platform	Item	1		
2	150mm waste pipe connected to pit	LM	2		
3	100mm ventpipe complete with vent cover	LM	3		
	TOTAL FOR FINISHES CARRIED TO SUMMARY				

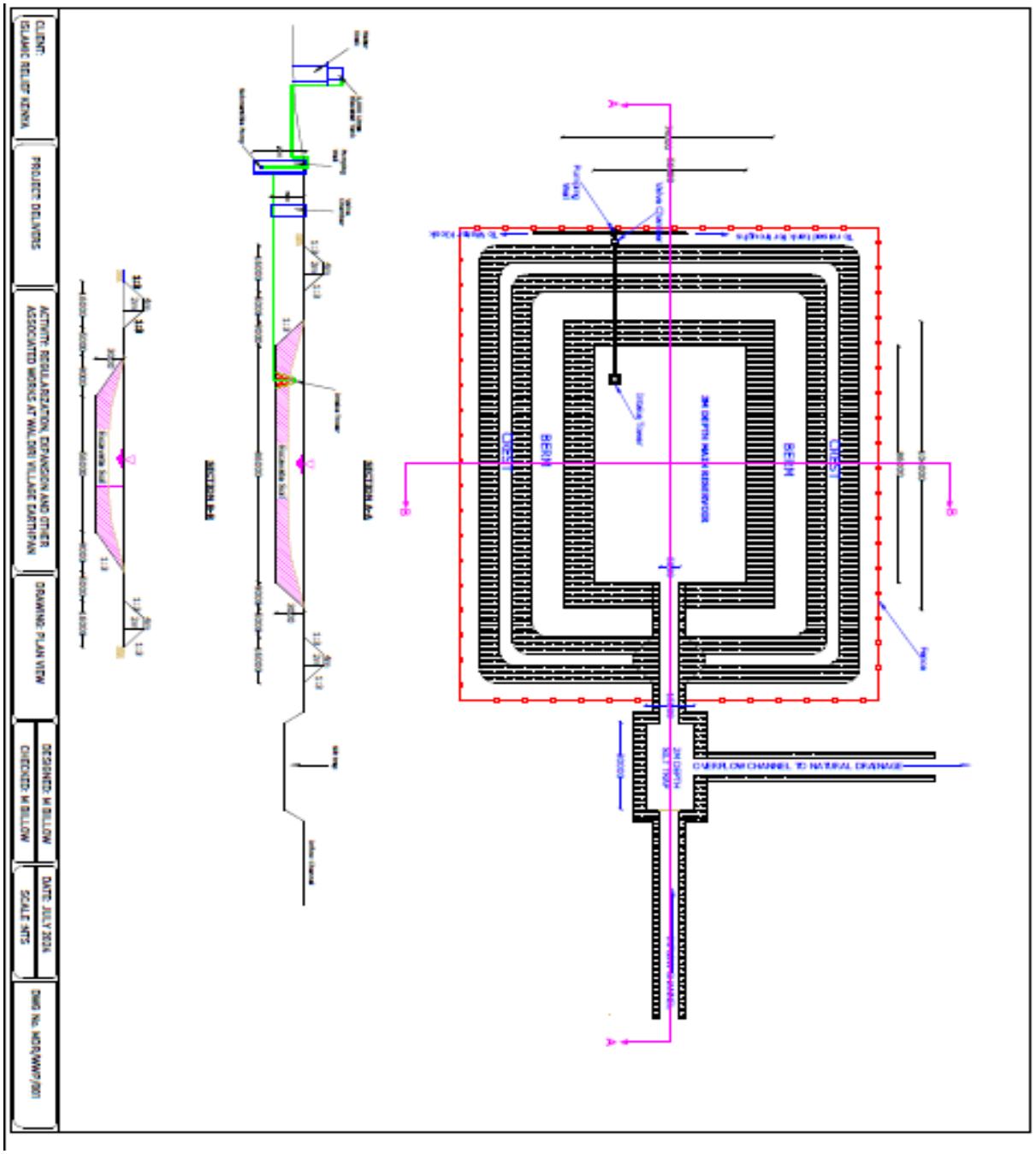
SUMMARY FOR BILL No. 12: CONSTRUCTION OF 1 No. TWIN LATRINE BLOCK

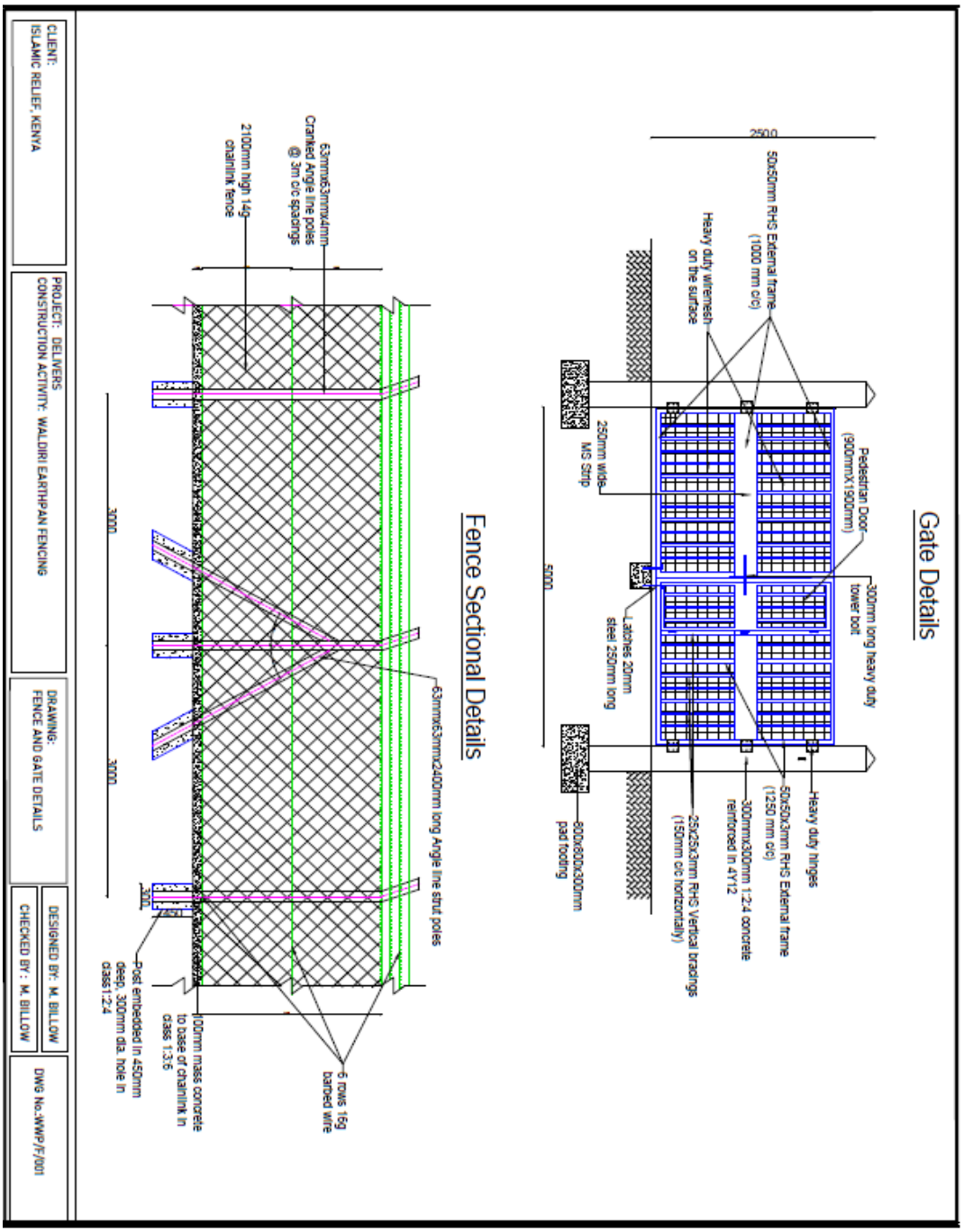
ITEM	DESCRIPTION			PAGE	AMOUNT
1	SUBSTRUCTURES				
2	FRAME/WALLING				
3	ROOFING				
4	DOORS				
5	FINISHES				
6	PIT EXCAVATION				
	TOTAL CARRIED TO GRAND SUMMARY				

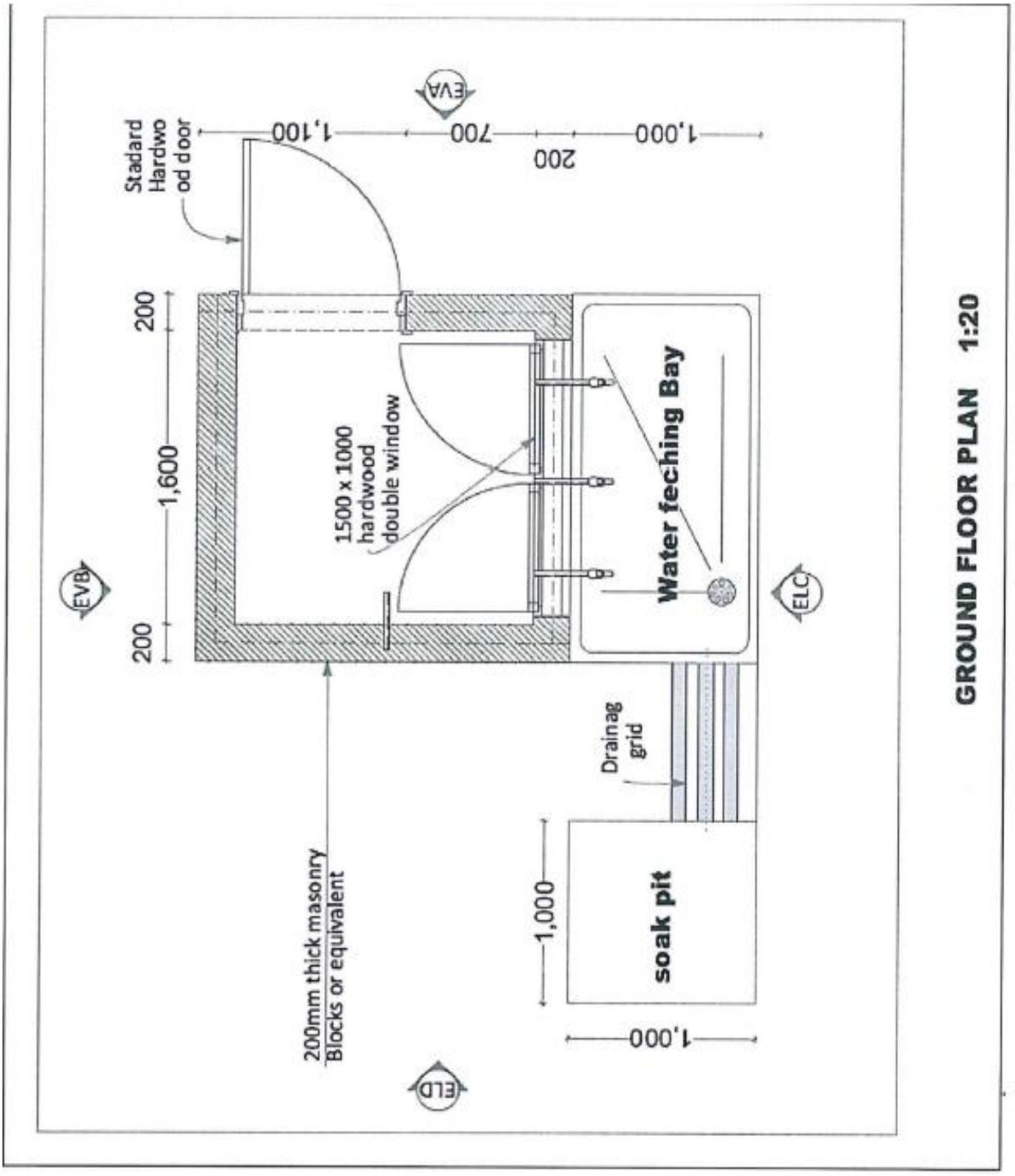
GRAND SUMMARY OF PROJECT COMPONENTS

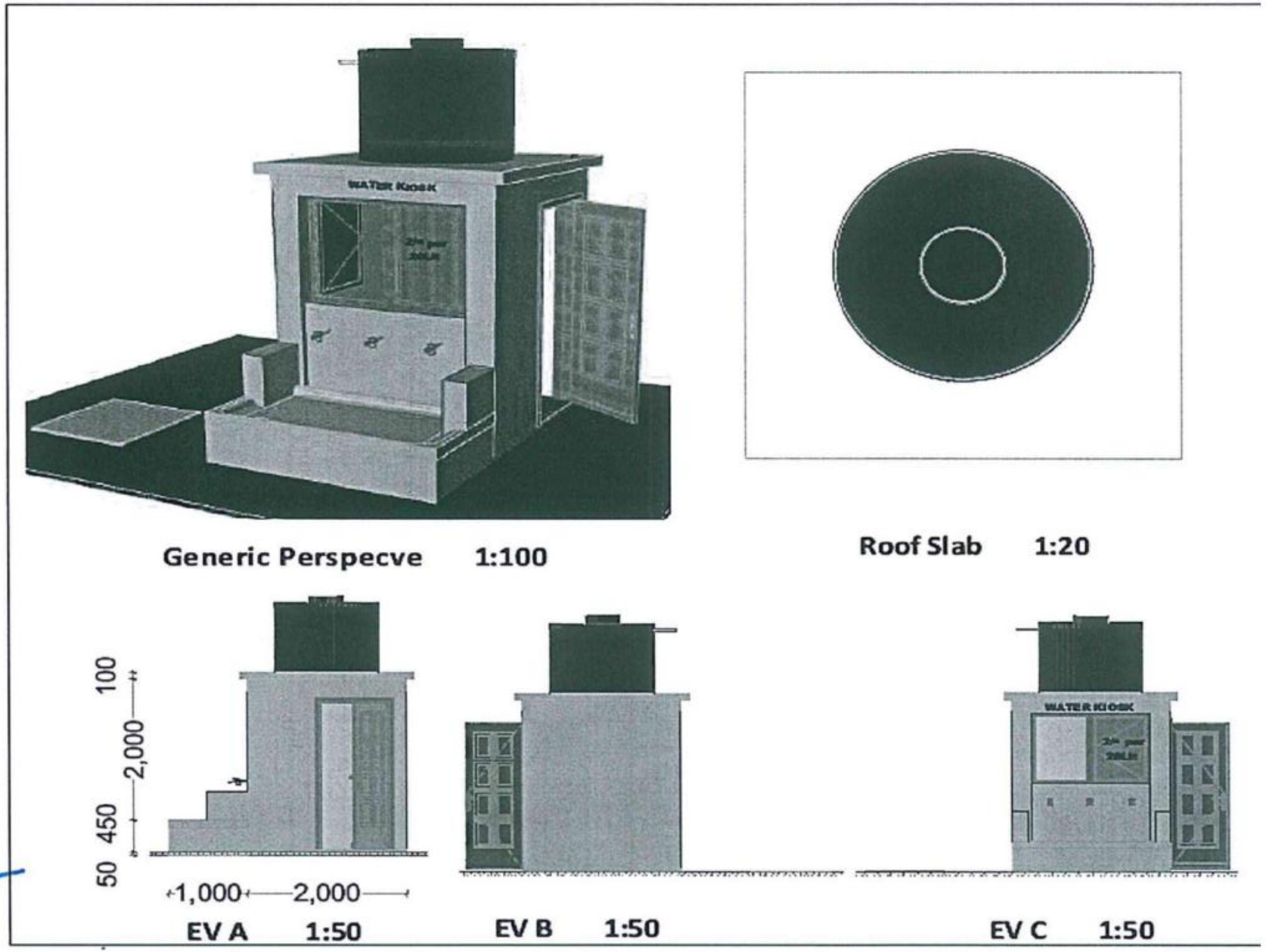
BILL	DESCRIPTION	AMOUNT
1	PROJECT SIGNBOARD	
2	SITE CLEARANCE	
3	EXCAVATION AND EARTHWORKS	
4	DAM LINER	
5	AUXILLARY WORKS AND EROSION CONTROL	
6	FENCING AND ENVIRONMENTAL PROTECTION	
7	INTAKE TOWER AND DRAW-OFF SYSTEM	
8	EQUIPPING AND SOLARIZATION OF THE PUMPING WELL	
9	CONSTRUCTION OF 2 ANIMAL TROUGHS	
10	RAISED CONCRETE PLATFORM WITH TANK AND ADJACENT COMMUNAL TAPSTAND	
11	CONSTRUCTION OF 1 WATER KIOSK WITH OVERHEAD TANK	
12	CONSTRUCTION OF 1 NO. TWIN VIP LATRINE BLOCK	
	SUB-TOTAL	

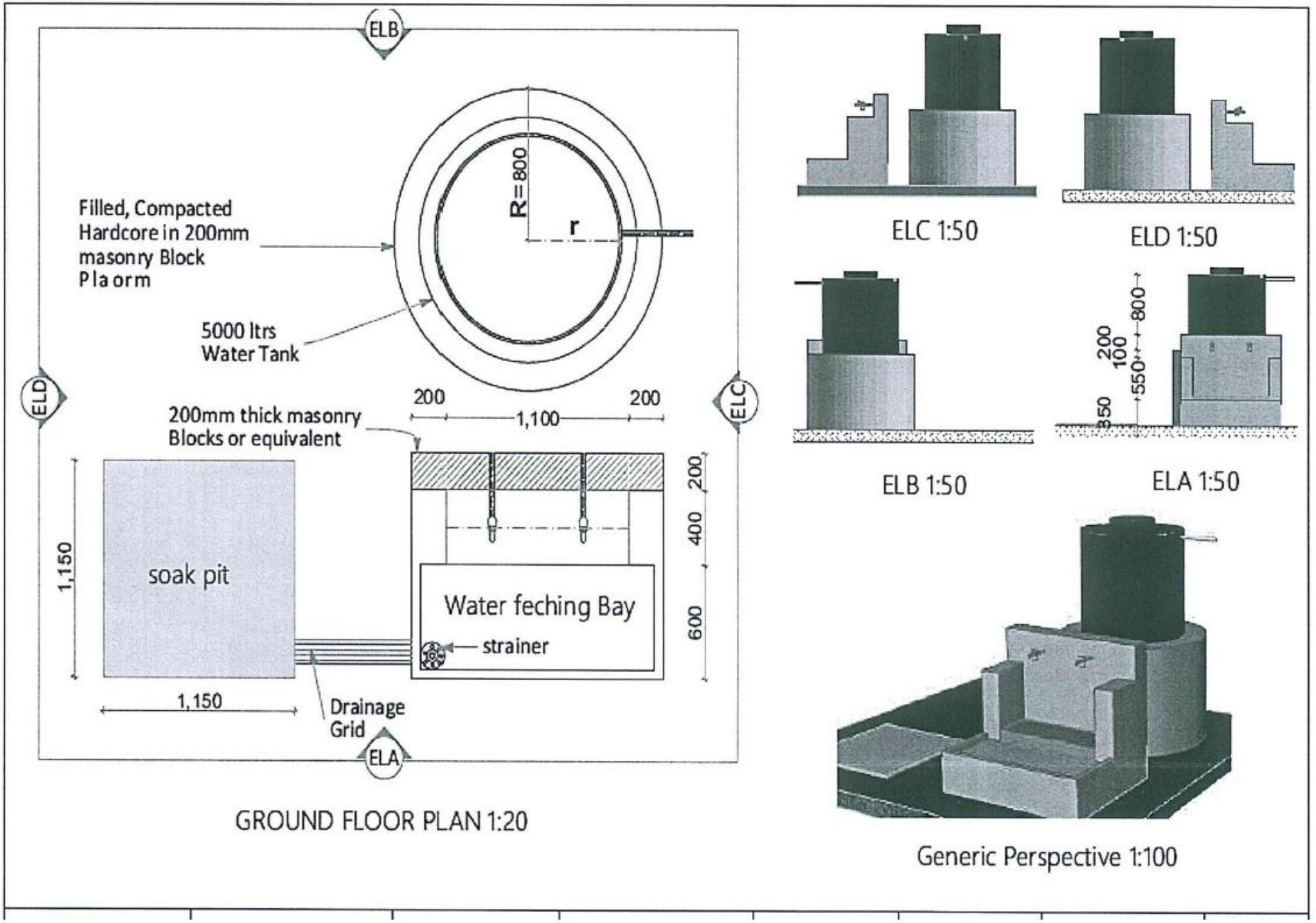
	Add VAT 16%	
GRAND TOTAL FOR REGULARIZATION, EXPANSION AND OTHER ASSOCIATED WORKS AT WALDIRI VILLAGE EARTHPAN		

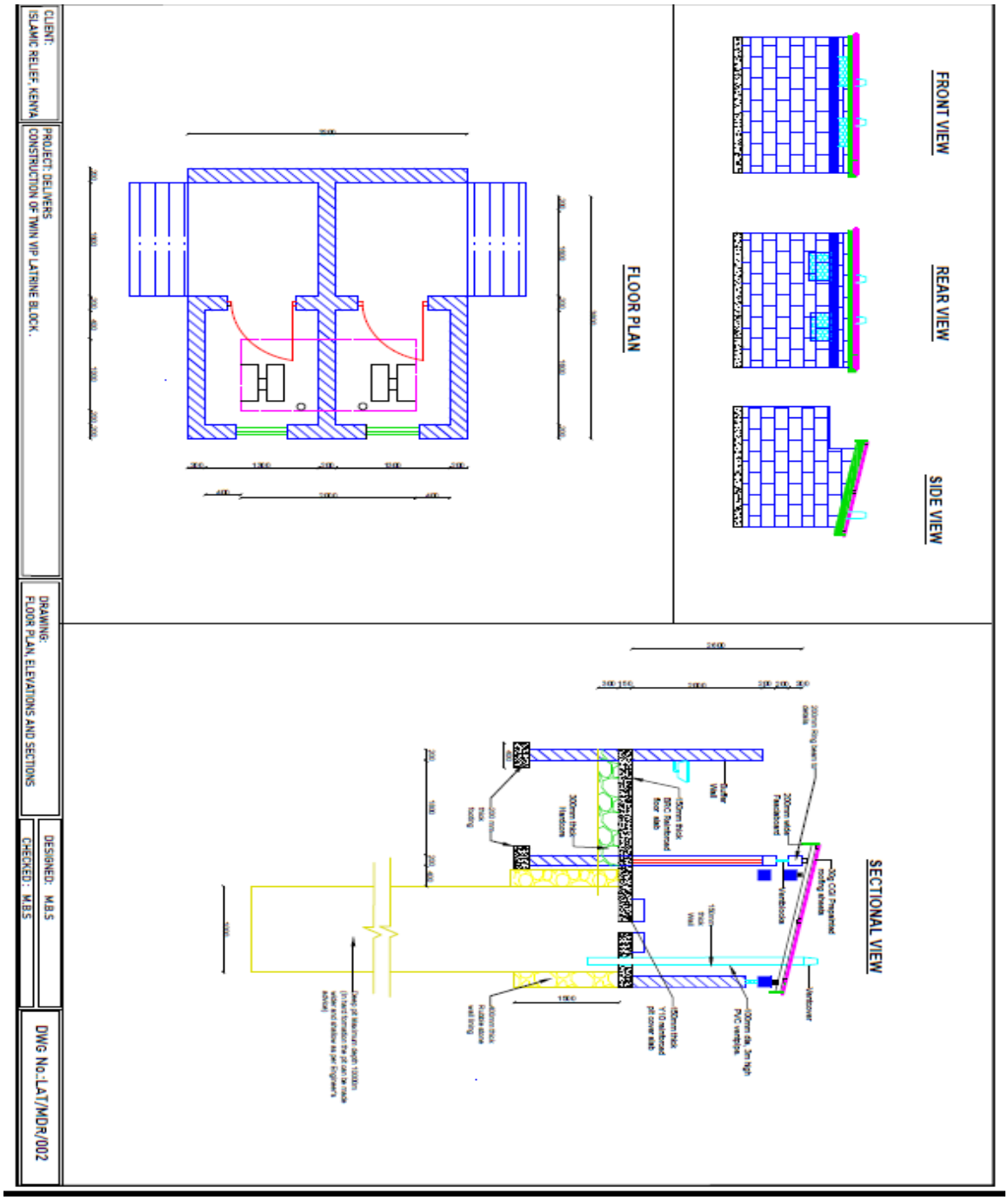

CLIENT:
ISLAMIC RELIEF KENYA
PROJECT DELIVERS
ACTIVITY REGULARIZATION, EXPANSION AND OTHER ASSOCIATED WORKS AT WALDIRI VILLAGE EARTHPAN
DRAWING: PLAN VIEW
DESIGNED: M BILLOW
CHECKED: M BILLOW
DATE: JULY 2024
SCALE: NTS
DWG No: MOR/WWP/003
SECTION A-A
SECTION B-B
BERM
BERM
CREST
CREST
OVERFLOW CHANNEL TO NATURAL DRAINAGE


CLIENT:
ISLAMIC RELIEF, KENYA
PROJECT: DELIVERS
CONSTRUCTION ACTIVITY: WALDIRI EARTHPAN FENCING
DRAWING:
FENCE AND GATE DETAILS
DESIGNED BY: M. BILLOW
CHECKED BY : M. BILLOW
DWG No:WWP/F/001
Gate Details
2500
50x50mm RHS External frame
(1000 mm c/c)
Heavy duty wiremesh
on the surface
Pedestrian Door
(900mmX1900mm)
300mm long heavy duty
tower bolt
250mm wide
MS Strip
5000
Latches 20mm
steel 250mm long
Heavy duty hinges
50x50x3mm RHS External frame
(1250 mm c/c)
300mmx300mm 1:2:4 concrete
reinforced in 4Y12
25x25x3mm RHS Vertical bracings
(150mm c/c horizontally)
800x800x300mm
pad footing
Fence Sectional Details
63mmx63mmx4mm
Cranked Angle line poles
@ 3m c/c spacings
2100mm high 14g
chainlink fence
63mmx63mmx2400mm long Angle line strut poles
3000
3000
300
Post embedded in 450mm
deep, 300mm dia. hole in
class1:2:4
100mm mass concrete
to base of chainlink in
class 1:3:6
6 rows 16g
barbed wire


GROUND FLOOR PLAN 1:20
Water feching Bay
soak pit
Drainag grid
1500 x 1000 hardwood double window
Stadard Hardwood door
200mm thick masonry Blocks or equivalent
1,000
1,600
200
700
1,100
EVA
EVB
ELC
ELD


WATER KIOSK
Generic Perspecve 1:100
Roof Slab 1:20
100
2,000
450
50
1,000
2,000
EV A 1:50
EV B 1:50
WATER KIOSK
EV C 1:50


ELB
ELD
ELC
ELA
R=800
r
Filled, Compacted Hardcore in 200mm masonry Block Pla orm
5000 ltrs Water Tank
200mm thick masonry Blocks or equivalent
200
1,100
200
1,150
soak pit
Water feching Bay
strainer
200
400
600
1,150
Drainage Grid
GROUND FLOOR PLAN 1:20
ELC 1:50
ELD 1:50
ELB 1:50
ELA 1:50
800
200
100
550
350
Generic Perspective 1:100


CLIENT:
ISLAMIC RELIEF, KENYA
PROJECT: DELIVERS
CONSTRUCTION OF TWIN VIP LATRINE BLOCK.
DRAWING:
FLOOR PLAN, ELEVATIONS AND SECTIONS
DESIGNED: M.B.S
CHECKED: M.B.S
DWG No:LAT/MDR/002
FRONT VIEW
REAR VIEW
SIDE VIEW
FLOOR PLAN
SECTIONAL VIEW